

PTO/SB/08a (05-03)

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| | | Application Number | 10/660,996 |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | Filing Date | September 12, 2003 |
| | | First Named Inventor | David J. Ecker |
| | | Group Art Unit | Not Yet Assigned |
| | | Examiner Name | Not Yet Assigned |
| | | Attorney Docket Number | IBIS0064-100 (DIBIS-0002US.P5) |
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| ✓ | CA | Aaserud, et al., "Accurate base composition of double-strand DNA by mass spectrometry," J. Am. Soc. Mass Spec. (1996) 7:1266-1269. | |
| | CB | Muddiman, et al., "Length and base composition of PCR-amplified nucleic acids using mass measurements from electrospray ionization mass spectrometry," Anal. Chem. (1997) 69:1543-1549. | |
| | CC | Wunschel, et al., "Heterogeneity in bacillus cereus PCR products detected by ESI-FTICR mass spectrometry," Anal. Chem. (1998) 70:1203-1207. | |
| | CD | Muddiman, et al., "Sequencing and characterization of larger oligonucleotides by electrospray ionization fourier transform ion cyclotron resonance mass spectrometry," Rev. Anal. Chem. (1998) 17:1-68. | |
| | CE | Hurst, et al., "Detection of bacterial DNA polymerase chain reaction products by matrix-assisted laser desorption/ionization mass spectrometry," Rapid. Comm. Mass. Spec. (1996) 10:377-382. | |
| | CF | Muddiman, et al., "Precise mass measurement of a double-stranded 500 base-pair (309 kDa) polymerase chain reaction product by negative ion electrospray ionization fourier transform ion cyclotron resonance mass spectrometry," Rapid Comm. Mass Spec. (1999) 13:1201-1204. | |
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| Examiner Signature |  | Date Considered | 2/17/06 |
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Sheet 1 of 5

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|---------------------|-----------------------|---|----------------|
| N | S1 | BAKER, et al., "Review and re-analysis of domain-specific 16S primers," J. Microbiol. Methods (2003) 55:541-555. | |
| | S2 | BENSON, et al., "Advantages of Thermococcus kodakaraensis (KOD) DNA polymerase for PCR-mass spectrometry based analyses," J. Am. Soc. Mass Spectrom. (2003) 14:601-604. | |
| | S3 | BLACK, et al., "Detection of trace levels of tricothecene mycotoxins in human urine by gas chromatography-mass spectrometry," J. Chromatog. (1986) 367:103-115. | |
| | S4 | CAMPBELL and HUANG, "Detection of California serogroup Bunyavirus in tissue culture and mosquito pools by PCR," J. Virol. Methods (1996) 57:175-179. | |
| | S5 | CHEN, et al., "A universal PCR primer to detect members of the Polyviridae and its use to examine the taxonomic status of several members of the family," Arch. Virol. (2001) 146:757-766. | |
| | S6 | CONRAD, et al., "16S-23S rDNA internal transcribed spacer sequences for analysis of the phylogenetic relationships among species of the genus Fusobacterium," Intl. J. System. Evol. Microbiol. (2002) 52:483-499. | |
| | S7 | DASEN, et al., "Classification and identification of Propionibacteria based on ribosomal RNA genes and PCR," System. Appl. Microbiol. (1998) 21:251-259. | |
| | S8 | DEFORCE, et al., "Characterization of DNA oligonucleotides by coupling of capillary zone electrophoresis to electrospray ionization Q-TOF mass spectrometry," Anal. Chem. (1998) 70:3060-3068. | |
| | S9 | DEMASURE, et al., "A set of universal primers for amplification of polymorphic non-coding regions of mitochondrial and chloroplast DNA in plants," Mol. Ecol. (1995) 4:129-131. | |
| | S10 | FLORA, et al., "Dual-micro-ESI source for precise mass determination on a quadrupole time-of-flight mass spectrometer for genomic and proteomic applications," Anal. Bioanal. Chem. (2002) 373:538-546. | |
| N | S11 | FOX, et al., "Identification of Brucella by ribosomal-spacer-region PCR and differentiation of Brucella canis from other Brucella spp. pathogenic for humans by carbohydrate profiles," J. Clin. Microbiol. (1998) 36:3217-3222. | |

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| ✓ | S12 | FOX et al., "Report of the 'Bioterrorism Workshop'", J. Microbiol. Methods (2002) 51:247-254. | |
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| | S18 | HAYASHI, et al., "Phylogenetic analysis of the human gut microbiota using 16S rDNA clone libraries and strictly anaerobic culture based methods," Microbiol. Immunol. (2002) 46:535-548. | |
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| | S20 | ISOLA, et al., "MALDI-TOF mass spectrometric method for detection of hybridized DNA oligomers," Anal. Chem. (2001) 73:2126-2131. | |
| ✓ | S21 | JANKOWSKI and SOLER, "Mass spectrometry of DNA: Part 2" Quantitative estimation of base composition," Eur. J. Mass Spectrom. Biochem. Med. Environ. Res. (1980) 1:45-52. | |
| ✓ | S22 | KAGEYAMA and BENNO, "Rapid detection of human fecal Eubacterium species and related genera by tested PCR method," Microbiol. Immunol. (2001) 45:315-318. | |

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








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Sheet 3 of 5

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|---|--------------------------|---|----------------|
|  | S23 | LITTLE, et al., "Rapid sequencing of oligonucleotides by high-resolution mass spectrometry," J. Am. Chem. Soc. (1994) 116:4893-4897. | |
|  | S24 | LIU, et al., "Improving the microdialysis procedure for electrospray ionization mass spectrometry of biological samples," J. Mass Spectrom. (1997) 32:425-431. | |
|  | S25 | MANGRUM, et al., "Solution composition and thermal denaturation for the production of single-stranded PCR amplicons: piperidine-induced destabilization of the DNA duplex," J. Am. Soc. Mass Spectrom. (2002) 13:232-240. | |
|  | S26 | MCCABE, et al., "Bacterial species identification after DNA amplification with a universal primer pair," Mol. Genet. Metab. (1999) 66:205-211. | |
|  | S27 | MEIYU, et al., "Detection of flaviviruses by reverse transcriptase-polymerase chain reaction with the universal primer set," Microbiol. Immunol. (1997) 41:209-213. | |
|  | S28 | MORICCA, et al., "Detection of Fusarium oxysporum f.sp. vasinfectum in cotton tissue by polymerase chain reaction," Plant Pathol. (1998) 47:486-494. | |
|  | S29 | MUDDIMAN, et al., "Characterization of PCR products from Bacilli using electrospray ionization FTICR mass spectrometry," Anal Chem. (1996) 68:3705-3712. | |
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|  | S31 | NULL, et al., "Preparation of single-stranded PCR products for electrospray ionization mass spectrometry using the DNA repair enzyme lambda exonuclease," Analyst (2000) 125:619-626. | |
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| ✓ | S33 | NULL and MUDDIMAN, "Determination of a correction to improve mass measurement accuracy of isotopically unresolved polymerase chain reaction amplicons by electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry," Rapid Comm. Mass Spectrom. (2003) 17:1714-1722. | |
| ✓ | S34 | NULL and MUDDIMAN, "Perspectives on the use of electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry for short tandem repeat genotyping in the post genome era," J. Mass Spectrom. (2001) 36:589-606. | |
| ✓ | S35 | NULL, et al., "Genotyping of simple and compound short tandem repeat loci using electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry," Anal. Chem. (2001) 73:4514-4521. | |
| ✓ | S36 | NULL, et al., "Implications of hydrophobicity and free energy of solvation for characterization of nucleic acids by electrospray ionization mass spectrometry," Anal. Chem. (2003) 75:1331-1339. | |
| ✓ | S37 | PENG, et al., "Rapid detection of Shigella species in environmental sewage by an immunocapture PCR with universal primers," App. Environ. Microbiol. (2002) 68:2580-2583. | |
| ✓ | S38 | POMERANTZ, et al., "Determination of oligonucleotide composition from mass spectrometrically measured molecular weight," J. Am. Soc. Mass Spectrom. (1993) 4:204-209. | |
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| ✓ | S40 | SCARAMOZZINO, et al., "Comparison of Flavivirus universal primer pairs and development of a rapid, highly sensitive heminested reverse transcription-PCR assay for detection of flaviviruses targeted to a conserved region of the NS5 gene sequences," J. Clin. Microbiol. (2001) 39:1922-1927. | |
| ✓ | S41 | SHAVER, et al., "Restriction fragment length polymorphism of rRNA operons for discrimination and intergenic spacer sequences for cataloging of Bacillus subtilis sub-groups," J. Microbiol. Methods (2002) 50:215-223. | |
| ✓ | S42 | SRINIVASAN, et al., "Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry as a rapid screening method to detect mutations causing Tay-Sachs disease," Rapid Comm. Mass Spectrom. (1997) 11:1144-1150. | |
| ✓ | S43 | STEFFENS and ROY, "Sequence analysis of mitochondrial DNA hypervariable regions using infrared fluorescence detection," Bio/Techniques (1998) 24:1044-1046. | |

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
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|  | S44 | WUNSCHER, et al., "Mass spectrometric characterization of DNA for molecular biological applications: advances using MALDI and ESI," Adv. Mass Spectrom., Vol. 14, Karjalainen, et al., (eds.) 1998, Elsevier, Amsterdam. | |
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